

## **REMARKS**

### **I. Introduction**

Pending claims 1-20 have been examined and are rejected. Specifically, claims 1-5 and 10-14 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,450,613 to Takahara et al. (hereinafter “Takahara”) in view of newly applied U.S. Patent No. 5,794,146 to Sevcik et al. (hereinafter “Sevcik”); claims 6-8 and 15-17 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Takahara in view of Sevcik, and further in view of U.S. Patent No. 5,870,680 to Guerlin et al. (hereinafter “Guerlin”); claims 9 and 18 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Takahara in view of Sevcik, and further in view of U.S. Patent No. 5,802,649 to Nounin et al. (hereinafter “Nounin”); and claims 19 and 20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Takahara in view of Sevcik, and further in view of U.K. Patent No. GB 2,328,588 to Hee-Won Seo (hereinafter “Seo”).

By way of overview, Applicant traverses the rejections of claims 1-8, 10-17 and 19-20, and overcomes the rejection of claims 9 and 18, as follows.

### **II. Claims 1-5 and 10-14 are Patentable over Takahara and Sevcik**

As noted above, claims 1-5 and 10-14 stand rejected under § 103(a) as allegedly being unpatentable over Takahara in view of Sevcik.

*A. Claims 1 and 10*

Claim 1 recites a unique combination of features directed to a radio communication apparatus comprising a radio portable terminal that includes a portable terminal section and a portable radio section. In claim 1, the portable terminal section decides a notification condition of a circuit state between the radio portable terminal and a base station based on information of power supplied to the portable terminal section. For example and not by way of limitation, Applicant's Table 1 illustrates four exemplary notification conditions based on information of power supplied to the portable terminal section.

Thereafter, the portable terminal section issues a notification of the notification condition, which is received by the portable radio section. The portable radio section notifies the portable terminal section of the circuit state when the circuit state satisfies the notification condition received from the portable terminal section.

Thus, in claim 1, the notification condition is a condition that the circuit state between the radio portable terminal and a base station must satisfy before the portable radio section will notify the portable terminal section of the circuit state. Furthermore, this notification condition is decided by the portable terminal section based on information of power supplied to the portable terminal section.

The Examiner alleges that Takahara discloses such a portable terminal section by describing a mobile communications equipment including a detection/notification unit 21 (Office Action: page 2; *citing* Takahara: Fig. 1). It is respectfully submitted that the

detection/notification unit 21 of Takahara, however, does not correspond to the recited portable terminal section.

In Takahara, the detection/notification unit 21 detects a state change between a communicable state and an incommunicable state of the communications equipment based on an analyzed result of analyzer 7, and notifies a user of the equipment when the state change has been detected (Takahara: col. 11, lines 50-57). In particular, the detection/notification unit 21 uses an analyzed result from analyzer 7 to detect whether or not the communications equipment lies within a service area in which it is communicable (Takahara: col. 12, lines 1-62). Then, if the user has enabled the notifying operation of the detection/notification unit 21, a notification of a change between the communicable and incommunicable states is provided to the user, for example, via a flickering LED 22 (*Id.*).

Thus, the detection/notification unit 21 of Takahara does not teach or suggest deciding a notification condition that the circuit state between the radio portable terminal and a base station must satisfy before the portable radio section will notify the portable terminal section of the circuit state. Instead, in Takahara, a notification is provided by the detection/notification unit 21 to a user and not from a portable radio section to a portable terminal section within a radio portable terminal.

Furthermore, the notification condition of claim 1 is decided by the portable terminal section based on information of power supplied to the portable terminal section. The Examiner acknowledges that Takahara fails to teach or suggest this feature of claim 1. The Examiner

alleges, however, that Sevcik makes up for this acknowledged deficiency of Takahara (Office Action: page 3; *citing* Sevcik: col. 7, line 47 to col. 8, line 12).

To the contrary, Sevcik relates to a system and method for conserving battery power in a mobile station when the mobile station is searching for a serving cell (Sevcik: col. 1, lines 7-10). Although constantly repeating the scans for beacon frequencies provides a mobile station with the best chance of rapidly acquiring/re-acquiring a service cell, maximizing the scan rate causes the highest power consumption of a battery of the mobile station (Sevcik: col. 2, lines 30-39). In Sevcik, a mobile station conducts a beacon signal search to select a serving cell in such a manner as to conserve battery use (Sevcik: col. 2, lines 40-44).

Sevcik describes that scanning for beacon frequencies is initially conducted with a small interval between the scans in hope of quickly acquiring a serving cell (Sevcik: Abstract; col. 7, lines 35-46). If a serving cell is not selected during this initial time period, then the interval between scans is increased in response to the increase in elapsed time since the start of the search (*Id.*). If a serving cell is not selected during this period of calculated intervals, then the interval between scans is set to a maximum limit to save battery power (*Id.*).

Sevcik, like Takahara, fails to teach or suggest deciding a notification condition that the circuit state between the radio portable terminal and a base station must satisfy before a portable radio section will notify a portable terminal section of the circuit state, let alone deciding such a notification condition based on information of power supplied to the portable terminal section. Instead, Sevcik merely describes increasing the time interval between scans for beacon signals as

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the battery power decreases (Sevcik: col. 7, lines 47-59). This use of battery power information to vary the scan rate for beacon signals does not correspond to the recited operation of deciding a notification condition of a circuit state between the radio portable terminal and a base station based on information of power supplied to said portable terminal section.

For at least the above reasons, claim 1 is patentable over the Examiner's proposed combination of Takahara and Sevcik. Claim 10 recites features similar to those of claim 1 and, thus, is patentable over the Examiner's proposed combination of Takahara and Sevcik based on a rationale analogous to that set forth above for claim 1.

*B. Claims 2-5 and 11-14*

Claims 2-5 and 11-14 are patentable over the Examiner's proposed combination of Takahara and Sevcik at least by virtue of their dependency, as well as the additional features recited therein.

For example, in claim 4, the power supply information includes power supply type information which is information indicative of whether the power supply being supplied is an ac power supply or a battery (*see also* claim 13). The Examiner alleges that Sevcik teaches these features of claim 4 (Office Action: page 5; *citing* Sevcik: col. 7, line 47 to col. 8, line 12). To the contrary, Sevcik, like Takahara, fails to teach or suggest any power supply information that indicates whether the power being supplied is an ac power supply or a battery.

**III. Claims 6-8 and 15-17 are Patentable over Takahara, Sevcik and Guerlin**

As noted above, claims 6-8 and 15-17 stand rejected under § 103(a) as allegedly being unpatentable over Takahara in view of Sevcik, and further in view of Guerlin.

Guerlin fails to make up for the exemplary deficiencies of Takahara and Sevcik set forth above. Consequently, claims 6-8 and 15-17 are patentable over the Examiner's proposed combination of Takahara, Sevcik and Guerlin at least by virtue of their dependency.

**IV. Claims 9 and 18 are Patentable over Takahara, Sevcik and Nounin**

As noted above, claims 9 and 18 stand rejected under § 103(a) as allegedly being unpatentable over Takahara in view of Sevcik, and further in view of Nounin.

Claims 9 and 18 are amended for further clarification. Nounin fails to make up for the exemplary deficiencies of Takahara and Sevcik set forth above. Consequently, claims 9 and 18 are patentable over the Examiner's proposed combination of Takahara, Sevcik and Nounin at least by virtue of their dependency.

**V. Claims 19 and 20 are Patentable over Takahara, Sevcik and Seo**

As noted above, claims 19 and 20 stand rejected under § 103(a) as allegedly being unpatentable over Takahara in view of Sevcik, and further in view of Seo.

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Seo fails to make up for the exemplary deficiencies of Takahara and Sevcik set forth above. Consequently, claims 19 and 20 are patentable over the Examiner's proposed combination of Takahara, Sevcik and Seo at least by virtue of their dependency, as well as the additional features recited therein.

For example, in claim 19 (*see also* claim 20), the portable radio terminal decides the notification condition by selecting a first notification condition from a plurality of predetermined notification conditions when the power supply type information indicates the ac power supply. The Examiner alleges that Seo teaches these features of claim 19 (Office Action: page 14; *citing* Seo: page 4, lines 16-37). To the contrary, Seo fails to teach or suggest any power supply information that indicates the power being supplied is an ac power supply.

## **VI. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

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Respectfully submitted,



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